



# This week's big news



### A young scientist



While working toward her PhD (top academic degree) in chemistry at Northwestern **University, Brittany Trang was** a key member of the team that found a way to break down forever chemicals. Trang has since become a science journalist and said she is "excited about helping people understand science."

# A breakthrough on harmful chemicals

n August 18, a team of US scientists announced that they had found a way to destroy chemicals that pose a threat to human health around the world. The discovery is considered a breakthrough in the search for a way to rid the planet of "forever chemicals," which pollute water, soil, and air.

### What happened?

In a study in the journal Science, researchers at Northwestern University in Illinois reported that they had developed an effective and inexpensive method for breaking down chemicals called per- and polyfluoroalkyl substances (PFAS). PFAS are known as forever chemicals because they don't break down naturally and remain hazardous for hundreds of years. Scientists had previously figured out how to

remove PFAS from contaminated

no safe and effective way to destroy

them once they were removed. The

water or soil but, until now, had

the water supply. study reported that when the team boiled PFAS molecules (the smallest portion of a substance) with two common substances, the PFAS quickly broke down and became harmless.

PFAS can get into

### What are PFAS?

2

PFAS, first created in the 1930s, are chemical compounds (substances made from two or more elements that have been chemically joined). They are used to make a wide range of everyday products, including nonstick pans, carpeting, electronics, and fast-food wrappers. The foam that firefighters use to put out fires is also treated with PFAS. Researchers have linked regular levels of exposure to these chemicals with several health problems, including liver damage, an increased risk of cancer, and reduced immunity (resistance to catching illnesses).

### How did the team make the discovery?

In 2020, William Dichtel, a chemist and professor at Northwestern, read a study

in which chemists at the University of Alberta, in Canada, found an easy way to break down chains of molecules. He asked a graduate student, Brittany Trang, to try the method on PFAS molecules. Trang had spent months in the lab unsuccessfully attempting to pull apart PFAS, and at first she thought Dichtel's

idea was too simple to work. But she tried it, boiling PFAS with a common solvent (a substance in which other materials dissolve) called dimethyl sulfoxide (DMSO). Trang was shocked when the process destroyed the PFAS. She later mixed DMSO with a chemical called sodium hydroxide and

broke down PFAS even more quickly. Dichtel said the finding is "exciting because of how simple yet unrecognized—our solution is."

### Why is the finding significant?

When companies manufacture products, PFAS are released into the air and dumped into waterways. Products containing PFAS end up in landfills and oceans. From there, the chemicals make their way into groundwater, soil, and crops around the world. Once the chemicals are in the environment, they are almost impossible to eliminate because they are designed to avoid breaking down. Each molecule is bonded together so it won't naturally decay and can't be destroyed by water or other natural substances. Dichtel and Trang's method could be a simple, inexpensive way to break those bonds.

### What will happen next?

The scientists will work on ways to destroy PFAS outside the lab so large amounts of forever chemicals can be broken down at once. "It's a huge challenge, but it's in our grasp," Dichtel told The New York Times. Scientists are also calling for a decrease in the amount of PFAS being released into the natural world. In June, the US government announced new plans to monitor PFAS, decrease the amount released into the environment, and address the effects of PFAS on human health.

# This week's big news

# Africa's tallest peak gets wifi

The government of Tanzania announced on August 16 that Mount Kilimanjaro, Africa's tallest mountain, now has high-speed internet access. Wifi is currently available for the lower two-thirds of the mountain and should be extended to the peak, at 19,341 feet, by the end of 2022.

Each year, about 30,000 people try to climb Kilimanjaro, and 80,000 guides and other workers help them. The trek is difficult, and climbers often get hurt. Up to 10 people die on the mountain each year. Government officials said that wifi will increase safety, allowing people on the mountain to more easily communicate with rescue and medical workers.

Some mountaineering experts, however, expressed concern that having wifi available on the mountain could pose a risk. Climbers could be distracted by social media or use inaccurate navigation apps, they said. Others said the Tanzanian government should focus instead on providing internet access to local communities that don't have it.





# Massive labor strikes in UK

Tens of thousands of workers in the UK have gone on strike (when employees stop doing their jobs to protest pay or working conditions). The work stoppages are disrupting transportation and business operations across the nation.

On August 18, garbage and recycling workers in Scotland began an 11-day strike. The next day, rail operators began their sixth strike since June, and most subway lines in London, England, came to a halt during a one-day work stoppage. On August 21, almost 2,000 workers at the UK's largest container port (where goods are received and sent out by ship) began an eight-day strike.

Workers are demanding higher pay, better working conditions, and job security. They are struggling with inflation (an increase in prices of

goods and services), which the UK government said is the highest it's been in 40 years.

Groups representing workers (called unions) acknowledged the problems caused by the strikes, including disruptions to the supply chain (process by which goods move around). "We're very sorry that people are inconvenienced," said Mick Lynch, a leader of a railroad union. "We're ordinary men and women who want to do our jobs." Many employers said they have offered workers reasonable wage increases and improvements.

Union leaders said the strikes will continue. Postal workers, lawyers, and staff at a major internet provider said they are planning to strike. When *The Week Junior* went to press, negotiations between workers and employers were ongoing.



# IT'S AN AMAZING WEEK FOR...

### A FRUITY NEW FLAVOR

Girl Scouts have added a flavor to their famous cookie lineup. The Raspberry Rally has a crunchy center dipped in a chocolaty coating. It's similar to Thin Mints, which the scouts called its "sister cookie." Rallys will be sold online in 2023.





### A SPECIAL REUNION

Author Jamil Jan Kochai was reunited with his second-grade teacher, Susan Lung, after years of searching for her. Lung came to one of his book readings, and Kochai thanked her for teaching him English when he first came to the US from Pakistan. "All [my] success...started with Mrs. Lung," he said.

### **BEATING THE HEAT**

Squirrels across the US have been seen sprawling on their bellies during recent heat waves. Wildlife officials said there's no cause for alarm—the squirrels are just "splooting" (stretching out with their back legs behind them) to cool off. The National Park Service had some advice for the squirrels: "Sploot like nobody's watching."



# **National news**



### Who is Merrick Garland?



As attorney general, Merrick Garland is the US government's top law enforcement officer. He leads the Department of Justice, a federal agency that employs more than 100,000 people, and makes decisions on a wide variety of legal matters. Previously, he was a federal judge and a nominee to the US Supreme Court.

# **Materials found in former President's home**

n August 8, about 30 agents from the Federal Bureau of Investigation (FBI) searched Mara-Lago, former President Donald Trump's home and office in Palm Beach, Florida. Agents removed about 30 boxes of materials, including 11 sets of classified documents (sensitive information the government has determined should be kept from public view). This was the first time the FBI had searched the residence of a former President.

### What led to the search?

Under the Presidential Records Act, every document a President generates while in office, whether it is classified or not, belongs to taxpayers and becomes the property of the government on the day the President leaves the job. After Trump left office in 2021, the National Archives

(agency that handles the nation's records) became concerned that documents created during his term may have been missing. In January 2022, the Archives retrieved 15 boxes of records from Mara-Lago that it said had been improperly removed from the White House. Archives officials believed there were more missing documents and asked the Department of Justice (DOJ), the government's law enforcement agency, to investigate.

### Why was the search conducted?

In April, the DOJ issued a subpoena (legal order) to require Trump to return any remaining documents. When additional documents were not returned, Attorney General Merrick Garland, head of the DOJ, authorized a search of Mar-a-Lago. DOJ lawyers applied for a search warrant (official

permission to search an area), and Federal Judge Bruce Reinhart approved it. Agents from the FBI (part of the DOJ) then conducted the search.

### **How did Trump react?**

Trump and his supporters have said they believe the search was conducted unfairly. He has called on the DOJ to release the document, called an affidavit, that was created to justify the warrant.

### What will happen next?

Judge Reinhart said he was open to releasing the affidavit but had not done so when The Week Junior went to press. Garland said he might make the unusual request to reveal the materials retrieved from Mar-a-Lago to the public to show why the search took place.

### VORD # WEEK

**DOG** 

Most dictionaries list the origins of the words we use, but some words, even common ones, remain a mystery. For instance, no one has yet discovered where the word "dog" comes from. Only one record of it exists in Old English. Until the Middle Ages, the word most used to describe a canine companion was "hound."

### THE WEEK IN HISTORY

### September 2, 1963

First half-hour news show airs On September 2, 1963, the CBS Evening News with Walter Cronkite became the first daily news show to double in length from 15 to 30 minutes. For the debut broadcast, Cronkite, the news anchor, interviewed President John F. Kennedy. Other newscasts soon extended their broadcasts. The same year, a poll found that for the first time more Americans got their news from TV than from newspapers.



# GETTY IMAGES (2); NASA; ALAMY; USPS; ON LEFT PAGE: GETTY IMAGES (2); AP

### **National news**





### Voyager marks major milestone

On August 20, the spacecraft Voyager 2 marked 45 years in space, becoming NASA's longest space mission. NASA (the US space agency) launched Voyager 2 in 1977 to study the solar system's outer planets. It was the first, and remains the only, spacecraft to fly close to Neptune and Uranus. It has also gone beyond the solar system into interstellar space (the space between stars in a galaxy) and is now more than 12 billion miles away from Earth.



### Free meals in California schools

A new law in California requires that the state's public schools provide free breakfast and lunch to all students in kindergarten through 12th grade—a total of 6 million students. A national program offers free meals to students from low-income households, but California is the first state to provide meals to all students. The law aims to ensure that more students have enough healthy food to eat.



### Stamps honor Mexican music

The US Postal Service has released stamps that celebrate mariachi, a style of music native to Mexico and important to Mexican Americans. The five new stamps feature musicians playing different instruments. The stamps were designed by Rafael López, who was inspired by his childhood in Mexico. "I'm excited and honored to share the vibrant spirit of this music with these stamps," he said.



# Study reports on teen internet use

eenagers in the US are spending more time online, a new study has found. The report shows that nearly all young people use the internet daily, but their feelings about it and the way they engage with it can vary.

The Pew Research Center, a nonprofit organization that conducts research on public opinions and issues, surveyed US teenagers

ages 13 to 17. The 1,316 respondents - 686 boys and 596 girls—answered questions about their use of electronic devices, the internet, and social media.

About 95% of teens said they had access to a smartphone, a 22% increase from the last

time Pew conducted a survey on this topic in 2015. About 90% had access to computers, 80% could access gaming consoles, and 72% said they had all three devices at home. In 2015, 24% of teenagers said they were online almost constantly. That number has almost doubled, reaching 46% in the new study.

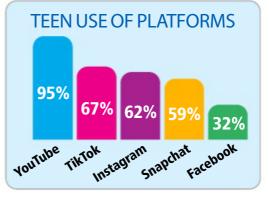
While online, young people most commonly said they watch videos on YouTube, followed by TikTok. Many also use the social media platforms Instagram and Snapchat, and a smaller number use Facebook. About 35% said they were on one of these five platforms almost constantly.

A majority of respondents (55%) think that the amount of time they spend on social media

> and online is about right. However, 36% said too much of their time is spent on social media. About 54%, many of them older teenagers, said it would be hard or very hard not to use social media.

In focus groups, many young people said that the

pandemic had affected the amount of time they spent online. When teenagers could not interact with friends in person, they used social media to maintain those connections, said Emily Vogels, who worked on the Pew report. Young people today are highly connected, she said, though the platforms they use can shift and change.



# THE WEEK'S SILLIEST HEADLINE

"'Guard cat' credited with preventing would-be robbery" AP



# **Around the world**

# a lot of water.

### Republic of Ireland Police force gets updated look

The Republic of Ireland's police force, the Garda, has a new look. Their old uniforms of formal shirts and ties have been replaced with comfortable clothing, such as polo shirts and waterproof jackets. It is the first time the uniform has been completely redesigned since the force was launched 100 years ago.



### **Gérardmer, France Protester drills holes in hot tubs**

A man in the town of Gérardmer, in northeastern France, has been detected on home security cameras drilling holes in homeowners' hot tubs around the town, allowing all the water to escape. According to notes left at the homes, he is angry about water being wasted during the country's drought (extreme lack of rain). His illegal actions are thought to have cost the owners nearly \$80,000 in damages.



### **Caceres, Spain Stone circle reappears**

A stone circle named the Dolmen of Guadalperal that dates back to about 5000 BCE has been spotted in central Spain. The circle, which was first found in 1926 but has been underwater since 1963, was revealed as the water level fell in the Valdecanas reservoir due to a drought in the country. Archaeologists said they are eager to get a closer look at it before the water levels rise again.



### Nigeria **Electricity is turned off**

On August 17, electricity workers in Nigeria shut down the country's power grid as part of a strike to protest their pay and working conditions, causing a nationwide blackout. After a meeting with the minister of power, the workers restored power supplies and agreed to suspend the strike for two weeks while they try to reach an agreement. Blackouts are common in Nigeria, and many homes have to use their own generators when the power goes out.



### **Bangladesh**

### Schools and offices cut hours to save fuel

Schools and offices in Bangladesh will be open for fewer hours each week, due to a power shortage. The country has had to close all 10 of its power plants that run on diesel because of high fuel prices. Schools will close one additional day per week, resulting in a four-day school week, and offices will cut each workday by about two hours.

# **Around the world**





### **Pakistan** YouTuber reunites families

In 1947, the Partition of India divided British India into two nations, India and Pakistan, and as a result many families were divided. Now YouTuber Nasir Dhillon is using his channel, "Punjabi Lehar," to reunite them. The channel became famous in India in January after it aired an emotional reunion of brothers who were separated as children.



### **Guangzhou**, China Judge rules in favor of cat owner

An art teacher, identified only as Luo, who was fired because her cat made an appearance during an online lesson, has received about \$6,000 after a court ruled she was treated unfairly. Luo's cat had jumped at her camera five times during her lesson, after which the education tech company she worked for fired her for taking part in "non-teaching" activities during working hours. The judge in the case said employers should be "fair and reasonable."

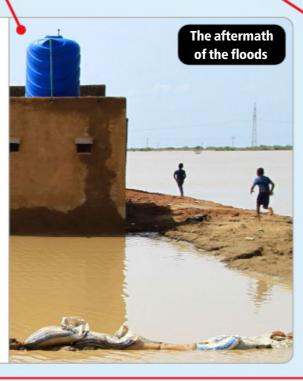
### **Philippines** Students return to school

On August 22, schools in the Philippines reopened for the first time since 2020, when they closed at the start of the Covid-19 pandemic. Precautions such as mandatory masks and handwashing are in place. Many pupils struggled with homeschooling because at least 80% of homes do not have internet access. One teacher told Reuters news agency, "I am happy to see the children face-to-face."



### Sudan ■ Floods cause harm

More than 70 people have died and 130,000 people have been displaced from their homes due to rains since the monsoon season began in Sudan in May. One of the largest dams in South Darfur was also damaged. In many areas, people are facing a shortage of clean drinking water and food. Although the **United Nations and other groups** have distributed relief supplies to more than 40,000 people, residents said more needs to be done.





### **Less cramped quarters for hens**

Animal rights groups in Australia have won a victory for hens. Egg companies must phase out the use of battery farming (a type of farming that keeps chickens caged very close together) for egg-laying chickens by 2036 and set aside more space for them. New Zealand ended the use of battery cages this year after a 10-year phase-out plan that began in 2012.

# The big debate

# Should take-out apps be banned?

Food delivery apps make life easier. Some say the convenience has a high cost.

### What you need to know

- In 2021, food delivery apps made \$22.4 billion in the US, and more than 45 million Americans used them for delivery to their homes or workplaces.
- The apps send delivery people by car, bike, or foot to pick up the food at restaurants and take it to customers.
- The apps charge restaurants a percentage of every sale, and customers pay for delivery.
- Some local governments have banned the apps or placed limits on the fees they can charge.

Whether a customer is craving pizza, sushi, or a burrito, it's at their fingertips with take-out apps such as DoorDash, Grubhub, and Uber Eats. All a hungry person has to do is open the app, scroll through an endless number of restaurant options, and have the food delivered to their door. That convenience and variety has made food delivery apps hugely popular, specifically in North America, Asia, and Europe, and especially during the Covid-19 pandemic. Many users say apps that bring provisions to people make life easier. Other people think they're bad for local businesses. What do you think? Should take-out apps be banned?



### Yes—the convenience isn't worth it

Many restaurants say take-out apps are more trouble than they're worth. Some apps take a huge bite of the money from each sale—as much as 30%. Restaurants must either increase their prices or earn less, in an industry where profits are already slim. The apps affect small, family-owned places the most. Not only do they make less to begin with, but they can't always keep up with the number of app orders they receive. That makes them look bad to customers. Meanwhile, delivery workers say they're not paid enough for a difficult, dangerous job in which they have to speed through busy streets. There are too many downsides to delivery.

### No—they provide an important service

Food apps bring restaurants more customers, many of whom might not have known about their business otherwise. More customers means more orders, so even if the apps charge a fee, the restaurant still wins. The apps helped struggling businesses stay afloat during Covid-19 lockdowns, when people couldn't go out to eat, and provided millions of restaurant and delivery jobs. Delivery people work hard, but they also have flexibility to work when and where they choose. And for busy people, the apps provide convenience and access to a variety of food after a long day at work or school, allowing for more time with family and friends.

### Three reasons why take-out apps should be banned

- They take money away from restaurants, which is particularly hard for smaller businesses that already make less.
- 2 Restaurants can get slammed with orders and have a hard time keeping up, which can cause them to lose customers.
- They create difficult and dangerous conditions for delivery workers.

### NO Three reasons why take-out apps should not be banned

- The delivery apps bring more customers to local restaurants.
- They provide jobs for millions of people, allowing them to work independently on their own schedule.
- They make meals convenient for customers, which allows people more time for the important things in life.

### **LAST WEEK'S POLL**

Last week, we asked whether people should take their shoes off indoors. It was a pretty clean sweep: 82% of you said yes, while 18% said no.

### What do you think?

Now that you've read a bit more about this issue, have a parent or guardian visit <a href="mailto:theweekjunior.com/polls">theweekjunior.com/polls</a> with you so you can vote in our debate. Vote YES if you think take-out apps should be banned or NO if you don't. We'll publish the results next week.

**The goal of the big debate** is to present two sides of an issue fairly in order to stimulate discussion and allow our readers to make up their minds. The views on this page do not reflect those of *The Week Junior*, and the page is not funded by third parties.



# Driven to succeed

new book

NBA star Steph Curry talks to *The Week Junior* about dreaming big.

Growing up, Stephen "Steph" Curry was told he didn't have what it takes to make it in pro basketball. He has since won four National Basketball Association (NBA) titles with the Golden State Warriors and

broken numerous records. Defying the odds is now the theme of his debut picture book, *I Have a Superpower*.

The book is about a boy who loves basketball and learns that being the tallest or strongest player on the court is not what it takes to win—having heart and determination is.

"I wrote this book to inspire the next generation of young readers and show them that truly anything is possible if they dream big and put their minds to it," Curry told *The Week Junior.* 

Curry first picked up a basketball when he was 5 and learned the game from his

dad, former NBA player Dell Curry. Because Curry is considered small by NBA standards (he is about 6 feet, 2 inches tall), he's been called an underdog success. "No one thought I would ever amount to being the

greatest at anything," he said.
"I had to experience failure
and overcome self-doubt to
get to where I am today."

In high school, Curry was overlooked by talent scouts from major college basketball programs. While attending Davidson, a small college in

North Carolina, he caught national attention for his performance on the court. Today, he is a two-time Most Valuable Player and a six-time NBA All Star. "I want every kid to know that they have superpowers of their own that are special," Curry told *The Week Junior*. "The only limit to their achievements is their imagination."



# Chef makes history

Robynne Maii has become the first Hawaiian woman to win a James Beard Award, one of the most prestigious honors in the food world. Maii grew up in Honolulu, Hawaii, and worked in New York City before returning to her home state to open her restaurant, Fête. Its menu showcases simple dishes made with ingredients from local, sustainable farms. Maii told *Honolulu* magazine that after winning the award for Best Chef in the Northwest and Pacific region, she feels "even more responsibility to continue to do good work."





# Remembering an icon

Singer and actress Olivia Newton-John, who was known for playing Sandy in the 1978 hit movie musical *Grease* and for popular songs such as "Let Me Be There" and "Magic," died on August 8 at age 73. Born in the UK and raised in Australia, she formed her first singing group at age 14. After returning to the UK to perform in clubs and on TV, she hit the US charts with a solo album in 1973. Throughout her career, she received four Grammy Awards (top music honor) and sold more than 100 million albums. "I've had many lives in music," she once told CNN. "I feel very grateful."





# **Animals and the environment**



### Fun facts about canines

- **SUPER HEARING** Dogs hear at a higher frequency than humans, so they hear sounds people can't.
- **NO SWEAT** Dogs sweat only through their paws. They (mostly) cool down by panting.
- **DOMINANT PAW** To tell whether a dog is right- or left-pawed, see which leg it leads with when it starts to walk.



# A wolfish discovery about dogs

ogs are our oldest animal companions and have probably lived alongside humans for at least 15,000 years. Over many centuries,

careful breeding has produced dogs that vary greatly in shape and behavior. All dogs are said to share the same wolf ancestors, but do they?

For a long time, scientists
have wondered where and
when humans and wolves
first learned to live together (a
process called domestication).
However, different approaches to the
question have produced different answers.

Dogs mostly descend
from Asian gray wolves.

question have produced different answers. Now a new study suggests an explanation for the confusion. Our modern canine friends may be the descendants of two different groups of wolves that learned to live alongside humans in separate events.

An international team of researchers, led by Pontus

Skoglund of London's Francis
Crick Institute, collected
remains from 72 wolves
found across Europe, Asia,
and North America.

The wolves lived at various times over the past 100,000 years. The team studied their DNA (a complex chemical that carries

instructions for how a living thing should grow and develop). Differences in the wolves' DNA could be used to determine how far back they shared an ancestor and help the team to make a rough family tree (diagram of relatives).

When the scientists compared DNA from ancient and modern dogs with the DNA from the prehistoric wolves, they found the closest match was to wolves from eastern Asia. But some dog breeds from western Asia and Africa, such as the basenji, also had DNA that could only have come from European wolves.

This suggests that either the ancestors of these particular dogs bred with local wolves after reaching Europe or the wolves were domesticated twice and their dog descendants bred later when they met each other. However, none of the ancient wolf DNA was a perfect match for dogs, so the exact spot where wolves became dogs remains a mystery—for now.



### **PLACE OF THE WEEK**

Prairie Creek Redwoods State Park, California

Established in the 1920s, the Prairie Creek Redwoods State
Park is located by the Pacific Ocean. It is part of the larger
Redwood National and State Parks, which is recognized as a
World Heritage Site for having some of the tallest, oldest, and
most imposing redwood trees in the world. The region has
hiking trails, open meadows, and sandy beaches. By the
coastal redwoods, visitors can spot herds of Roosevelt elk,
brightly colored banana slugs, and marine creatures such as
Pacific gray whales and California sea lions.







# Wild bison get back to nature

arlier this summer, the first bison to roam free in the UK after thousands of years were released into the countryside in England. As part of a project managed by two local conservation charities, a small herd of bison is now living freely on a nature reserve.

The project's goal in reintroducing these ancient animals is to transform the surrounding environment—currently a dense, man-made pine forest—back into a natural mixed woodland that can support a rich variety of wildlife. Bison love to eat tree bark. This can help control the growth of pine

trees, creating trails through the forest and allowing more sunlight to reach the forest floor. They also love to roll around on the ground, which creates more open spaces. With more sun and space, there will be more areas for plants to grow, This will allow insects and animals, such as bats, to thrive.

The charities said other grazing animals, including Exmoor ponies, Longhorn cattle, and prehistoric pig breeds, will later join the bison. Their impact will be monitored by the growth of new plants and other animals that naturally return to the habitat as it changes.

# Animal of the week

Lumpfish



Researchers believe they have found the true color of lumpfish: bright neon green. They found that the fish glow under ultraviolet (UV) light. Since humans cannot typically see UV light, lumpfish were previously thought to be different colors.

- LIFE SPAN: About seven years in the wild
- **HABITAT:** On the ocean floor in northern waters
- SIZE: Up to 24 inches long
- **DIET:** Includes shrimp, jellyfish, and small fish
- FUN FACT: Lumpfish have a fin that acts like a suction cup and attaches to rocks and seaweed.



# **Good week / Bad week**



### **Tasmanian kelp forests**

Forests of kelp had almost vanished from the seas off the Australian island of Tasmania because of warming waters. However, scientists have found a way to grow kelp in tanks that can stand up better to heat and then replant it in the ocean.



### **Grasshopper sparrows**

Grasshopper sparrows are struggling to adjust to climate change, according to new research. This may be one reason why populations of the bird, which was once common throughout grasslands in North America, have been declining.



# "Are tigers black with orange stripes or orange with black stripes?" Talia, 9, Connecticut

# **MJ Foletta**Carnivore keeper, Nashville Zoo

Neither! Tigers have what we call true stripes. True stripes mean the pattern on their coat is the same pattern on their skin. If you were to do something crazy like shave a tiger, they would still be striped. An example of an animal without true stripes is a zebra. Zebras are black with white stripes.



**Do you have a question for a zookeeper? Send it to** hello@theweekjunior.com. **Find out more about Nashville Zoo at nashvillezoo.org.** 

A painting of

**Shah Jahan** 

# All about the Taj Mahal

# A majestic wonder

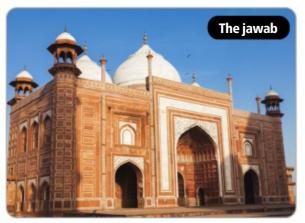
# Find out about the fascinating history of a famous masterpiece.

In the city of Agra, India, one of the world's most celebrated structures rises from the banks of the Yamuna River. This iconic monument stands 240 feet tall and stretches over 42 acres of land. But its story is even grander than its size.



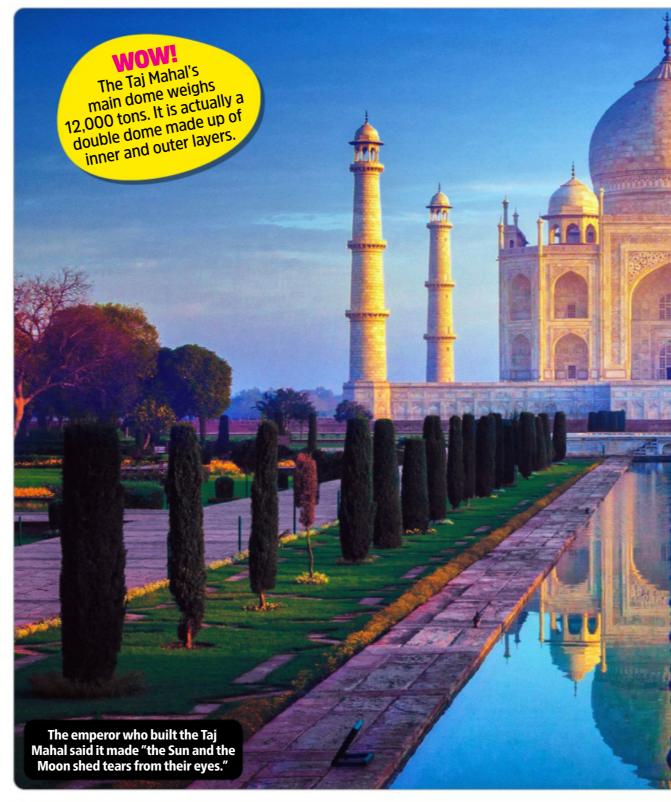
The story begins with the Mughal emperor Shah Jahan, whose name means "King of the World." Shah Jahan ruled over much of South Asia from 1628 to 1658. His wife, Arjumand Banu Begum, was known as Mumtaz

Mahal ("Chosen One of the Palace"). When she died in 1631, Shah Jahan wanted to keep her memory alive forever by creating a mausoleum (building that houses tombs for the dead). It is said that he was trying to build a resting place for her that would be like heaven on Earth. The name would be Taj Mahal, from Persian words meaning "Crown Palace."



### How it was made

The chief architect of Shah Jahan's heavenly vision was likely Ustad Ahmad Lahawrī, an Indian man of Persian descent. More than 20,000 workers began construction in about 1632. To transport building materials from as far away as Egypt, they had help from about 1,000 elephants. Five main elements were created: a mosque (place of worship for Muslims), a jawab (building that mirrors the mosque), a garden, a gateway, and the large, domed mausoleum, which was completed first, in about 1638. Decorative work continued for years.



# Tricks of the Taj Mahal

Many aspects of this marble monument are not as they appear at first sight. Here are a few artful illusions and architectural feats to know about.



### Does it shrink?

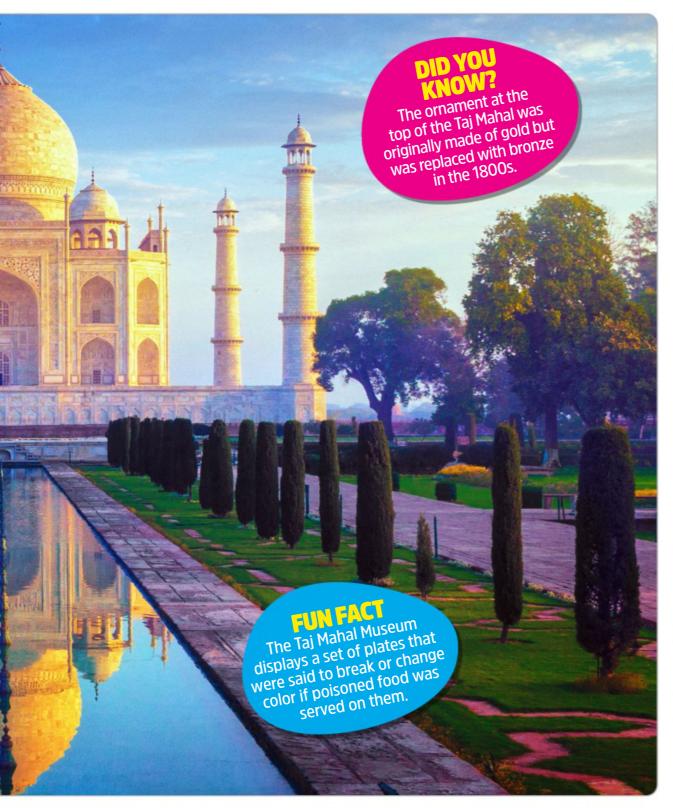
As visitors enter the main gate (at left) and look through its arches, the domed monument appears to be close and very large. But as they walk closer, it seems to shrink—appearing smaller than people expect it to be.

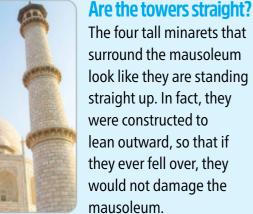


# All about the Taj Mahal



# of the world





### The four tall minarets that surround the mausoleum look like they are standing straight up. In fact, they were constructed to lean outward, so that if

### Where are the bodies?

Mumtaz Mahal and Shah Jahan are buried in the Taj Mahal, but they are not inside the beautiful cenotaphs (false tombs) in the mausoleum's eightsided chamber. Their bodies lie on a lower level, beneath the chamber.



### Fascinating features

The Taj Mahal is mostly made of white marble, which often appears as slightly different colors—gold, blue-gray, or pink—as it reflects sunlight or moonlight. The central dome is surrounded by four smaller domes and four minarets (tall, thin towers), and the structure looks nearly the same from all sides. The mosque, jawab, and Great Gate frame the pearly mausoleum with red sandstone. Ornate decorations cover much of the structure, including many carvings, mosaics, and semiprecious stones. Verses from the Quran (holy text of the religion of Islam) are inscribed on all four of the arched entrances. Between the gate and the dome are four gardens divided by stone pathways and pools of water.



### The Taj Mahal today

When people around the world think about India today, many think of the Taj Mahal. The landmark is a source of pride for the country and has been considered a wonder of the world. In 1983, it was declared a UNESCO World Heritage Site. The monument attracts up to 8 million visitors a year, and great care is taken to protect it. In the early 1900s, a major restoration was carried out. In 2020, the entire monument was cleaned. The love between an emperor and his wife has lived on for hundreds of years in the Taj Mahal, and people are working to keep it strong for hundreds more.



# Science and technology



# Penguins learned to live in the cold

Penguins are known for sliding on ice and plunging into chilly seas. But their ancestors led very different lives. Millions of years ago, penguins lived in warm climates and could fly. Now, in one of the largest studies of penguin evolution (changes to a living thing over a long period of time), an international research team has discovered how penguins took to the cold.

Scientists believe penguins first lived in modern-day New Zealand and spread out across South America and Antarctica, at a time when the planet was warmer than it is now. "They lived through some of the hottest times in Earth's history," said Daniel Ksepka, a paleontologist (scientist who studies fossils) who worked on the study.

Then, about 60 million years ago, the birds lost the ability to fly and began using their wings to dive and swim to catch fish. Over time, the Earth repeatedly cooled down and warmed back up. Penguins migrated north to warmer, tropical areas, then back to the South Pole. Their ability to adapt to extreme environments helped them survive.

To see how penguins evolved this way, the researchers first analyzed the genomes (the

complete set of chemicals that carry instructions for how a living thing develops) of modern penguins. There are about 18 species of penguins living today. The team then examined fossils of about 50 extinct (no longer living) penguin species. They also looked for historical events that happened at the same time as any changes in the birds' bodies.

The scientists identified several genes

(short sequences of genetic information)
that likely helped penguins adapt

and survive. Some of the genes kept them warm by packing on thick layers of fat, called blubber. Other genes made it possible for them to dive deep without needing as much oxygen or gave them a taste for sour and salty flavors, making their fish-based diet seem pretty tasty.

Because these changes helped ancient penguins stay alive, they stuck. For the last several million years, penguins have not evolved as quickly as other birds because they haven't needed to, the researchers said. However, now that the climate is changing again, scientists wonder if penguins will be able to adapt. Studies like this are a first step in understanding what could happen to the creatures in the future.

An illustration of an

extinct giant penguin

### A robot among penguins



Studying penguins in snowy Antarctica is challenging, and the presence of people can stress the animals. So researchers from the Woods Hole Oceanographic Institution (WHOI) in Massachusetts are using a robot helper. The 3-foot-tall rover (wheeled robot), named ECHO, has GPS, sensors, and a 360-degree camera. It keeps track of where groups of penguins move and helps scientists identify individual animals.

each of the birds from their electronic tags, which researchers implanted when they were chicks. WHOI will use this data to study the penguins' behavior and document how well they adapt to climate change (long-term changes in weather patterns, including temperature, largely due to human activities).

# Science and technology



# Research shows gardening boosts mood

Scientists studying the effects of gardening found that participating in the activity twice a week can improve mental health. A team from the University of Florida studied 32 women between the ages of 26 and 49 who did not have any ongoing medical conditions. None of the women had

The researchers
split the women into
two groups. One group
participated in gardening,
while the other group took art classes.

Studies suctreties suctreties suctreties specified and weeding digging, raking, and weeding digging, raking, and weeding are a beneficial form are a beneficial

gardened before.

During the gardening sessions, the women performed tasks such as planting seeds, transferring plants to new pots, and tasting edible plants. After each session, participants

sessions twice a week for four weeks.

answered questions measuring their anxiety, depression, and mood levels. They also had their blood pressure and heart rate monitored.

While both groups experienced improved mental health, the group who gardened benefited slightly

more, reporting less
stress, anxiety, and
depression. The
research team hopes
to learn more about
how gardening and
mental health are connected.

In the meantime, many women who participated in the study will continue to benefit. "At the end of the experiment, many of the participants were saying not just how much they enjoyed the sessions but also how they planned to keep gardening," said Charles Guy, one of the study's lead scientists.





# Floating city will hold 20,000 people

A floating city is taking shape in the Maldives, a country made up of islands in the Indian Ocean. The city will have 5,000 housing units for 20,000 people and include restaurants, shops, and schools. The first residents could move in by 2024.

The city is designed to help the Maldives adapt to climate change. As sea levels rise, much of the nation is projected to be underwater by 2100. A floating city, however, would rise along with the water.

The housing units will be built off-site, moved to the water, and arranged in a lagoon. They will be attached to concrete on the seabed for stability. Artificial coral banks will be grown under the city, and solar power will provide electricity.

In place of air-conditioning, cold water will be pumped up from the sea to cool the city. There will be no cars. Residents will walk or use boats, bicycles, or electric scooters to get around.



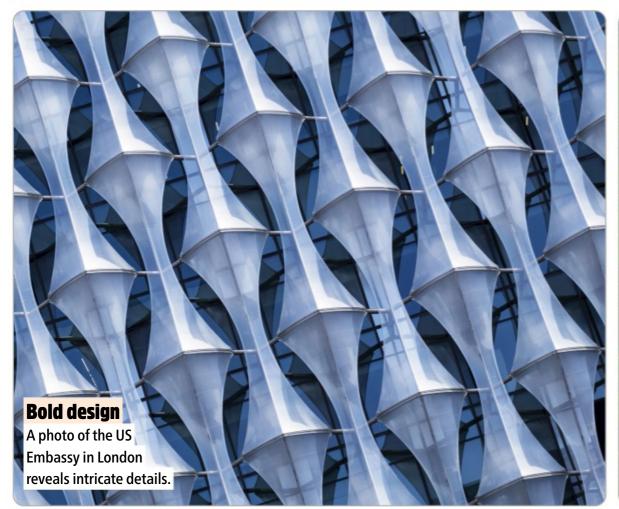
Scientists have designed a glove with suckers on each finger that make it possible to grip and handle slippery underwater objects. The Octa-glove was created by a team at Virginia Tech. The researchers were inspired by octopus arms, which are

covered with suckers that help the arms stick to objects.

So far, the Octa-glove has been used to pick up a plastic spoon, a small toy car, and a metal bowl. The team hopes that it can eventually be used in underwater rescue missions and for researching marine animals.



# Photos of the week



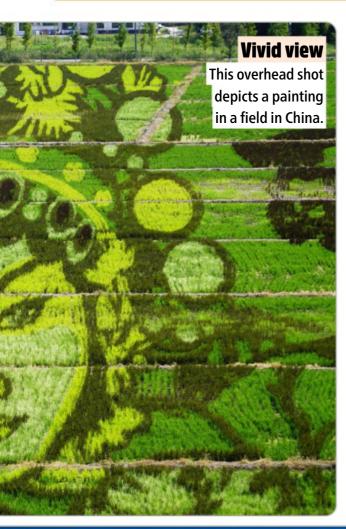




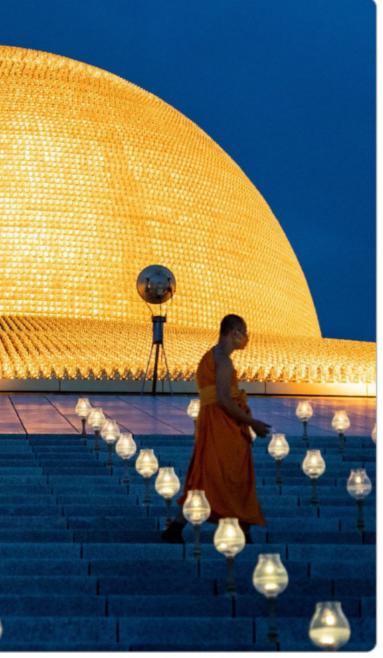


# Photos of the week















### New gymnastics team



Fisk University, in Nashville, Tennessee, is the first HBCU (historically Black college or university) to have a women's gymnastics team. A video of its first practice in August went viral, getting more than 800,000 views and 257,000 likes. The team will compete this fall.

# Gymnasts compete for US title

The United States Gymnastics Championships was held in Tampa, Florida from August 18–21. The event featured some of the top gymnasts in the country and ended with a close finish

in the women's competition. Konnor McClain, age 17, stunned the gymnastics world by claiming the women's national all-around championship, narrowly edging out Shilese Jones, age 20. It was McClain's first time competing in a senior nationals competition. The win came a year after she had struggled with anxiety and relocated from West Virginia to a new training center in Texas. McClain put together eight solid

**Brody** 

routines over two days to deliver a winning 112.750 all-around total score. "I never thought this could happen—ever," McClain said.

> Jones had led the overall women's competition after the first day of events but dropped behind McClain after falling on the balance beam on the second day. Jones bounced back with strong performances the rest of the day but ultimately finished in

second place with a 112.000 score.

Malone Olympians Jordan Chiles and Jade Carey finished third (111.900) and fifth (110.900), respectively, and Kayla DiCello scored 110.950 to secure fourth place.

On the men's side, Brody Malone, age 22, followed up his first national all-around title in 2021 with another dominant performance. He earned a top score of 176.590, about five points ahead of Donnell Whittenburg, age 28. Rising star Asher Hong, age 18, finished third.

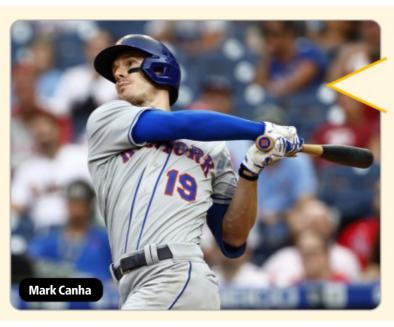
Two big names in the sport didn't compete in the event this year: Simone Biles, winner of seven of the last eight US Championships, and Sunisa Lee, the 2020 Olympic all-around champion.

Eight of the women who competed made the US Senior Women's National Team. earning spots at the upcoming US Olympic Team Trials. Malone and Whittenburg won spots on the men's world championships team after their wins.

### THIS WEEK'S WINNERS...

### **WOMEN'S BASKETBALL**

The Las Vegas Aces, the top seed in the **Women's National Basketball** Association (WNBA) playoffs, have advanced to the second round after sweeping their series against the **Phoenix Mercury. Guard Chelsea Gray** scored 27 points and had eight assists for the Aces in the series-clinching win. In the second round, the Aces will play the Seattle Storm, who swept the Washington Mystics in the first round.



### MAJOR LEAGUE BASEBALL

The New York Mets won three out of their four games against rival the Philadelphia Phillies to maintain their lead in the National League East. Mark Canha hit two home runs in the last game, which the Mets won, 10-9.

### **US SWIMMING**

Duel in the Pool, a swim competition between the US and Australia, was held for the first time since 2015. The US won, 309-283. The US has now won all eight of these contests.



# Women's international soccer cup held

On August 20, the French club team Olympique Lyonnais defeated the Mexican club team C.F. Monterrey, 4–0, to win the 2022 Women's International Champions Cup (ICC). American Lindsey Horan scored two goals for Lyonnais in the final and was named the tournament's Most Valuable Player.

The tournament was held in Portland, Oregon, at Providence Park, which is the home of the Portland Thorns, a National Women's Soccer League team. The Thorns were the defending champions, having won the ICC in 2021. This year, they lost to Monterrey on penalty kicks in the semifinals.

The ICC is an annual competition among some of the best women's club soccer teams in the world, such as England's Chelsea FC

Women's team, which won the 2022 Women's Super League. Chelsea lost to Lyonnais in the semifinals and then defeated the Thorns in the compensation match to take third place. This was C.F. Monterrey's debut in the ICC, representing Mexico for the first time in the tournament.

In the final, Horan opened the scoring by converting a penalty kick in the 39th minute. A few minutes later, she converted a cross from Delphine Cascarino, hitting a shot into the far corner of the net. In the second half, Sara Dabritz scored a third goal for Lyonnais after intercepting a pass from Monterrey in the penalty area. In the 64th minute, pressure from Lyonnais forced a turnover in the penalty area, and Signe Bruun got to the ball and scored the fourth and final goal of the match.



### **COACH OF THE WEEK**

Coach's Name: Jason Winters

Team: Alabama Crimson Tide (softball)

"Coach Jason is an amazing coach. He is always finding new drills to help our team to improve at anything and everything. During our season he is always helping our team stay on track and will never hesitate to make a change to help us get better. He makes the seasons so much fun with his encouragement and positive attitude." Ellie, 9, California

To nominate a Coach of the Week, send your coach's name, photo, sport, and team to *hello@ theweekjunior.com*. Include your name, age, state, and a few reasons why your coach is great.





# **Adam Crampton**

AGE: 21 SPORT: BASEBALL TEAM: STANFORD UNIVERSITY

**Batter up** I started playing ball when I was 3 and got a Wiffle ball bat, ball, and tee as a gift. I always said I wanted to grow up and be a professional baseball player, but I didn't realize it was something I could and wanted to fully pursue until I made the 12U National Team.

Role model Derek Jeter was my favorite player growing up. He was a leader on the field and played the game the right way. It was fun watching him make his signature jump throw. I tried to re-enact that countless times as a kid.

**Skills and drills** I practice almost every day. I like to do wall ball, which is throwing a lacrosse ball against a wall and working on softening my hands. And I love taking ground balls from different positions on the field and working different arm angles.

**Easing pressure** When I bat in a big game, I make sure to breathe and I don't make the moment bigger than it is. It is still you versus the pitcher.

**Getting better** My freshman year of college, I made a lot of errors in my first few games. Turning those struggles around and winning Defensive Player of the Year is something I am very proud of.

**Biggest wins** We made it to the College World Series in Omaha in back-to-back years.

**Best advice** Do the extra work your peers aren't going to do. Do the work when nobody is watching you and even when you don't want to do it. Most important, make sure that you are always having fun. Play loose and free and enjoy the moment.





# **Arts and entertainment**



# Seeing ancient art in color

An exhibition at The Met museum features pieces that imagine the way Greek and Roman sculptures originally looked.

hen Ancient Greek and Roman sculptures **V** were displayed thousands of years ago,

they didn't look like the plain white marble pieces people see today. Instead, they were painted in vibrant hues that have faded over time. The exhibition Chroma: Ancient Sculpture in Color at The Metropolitan Museum of Art (The Met) in New York City is filled with reconstructions of those creations. The Met and the Liebieghaus Sculpture Collection in Frankfurt, Germany. It features the work of

> archaeologists Dr. Vinzenz Brinkmann and Dr. Ulrike Koch-Brinkmann, who have researched and studied polychromy (multicolored ancient sculptures) for decades. The show contains 17 of their reconstructions, including a sphinx they created for The Met.

To figure out what art may have looked like, original pieces are examined with lights, microscopes, and other

technology to find grains of pigment. In the ancient world, pigments were made from natural substances, like minerals. The Brinkmanns use similar ones in their work.

Painting sculptures makes their details more visible, Sarah Lepinski, an associate curator (person who chooses art) at The Met, told *The* Week Junior. The original sphinx sat on a high pedestal, she said. "Without color, you can't really see the patterning of her feathers or her necklace, eyes, or hair." Lepinski said she hopes the exhibition gives people a new understanding of antiquity "and an impression of just how colorful it was."

### The sphinx Chroma is a collaboration between reconstruction

### Phidias, who died around 430 BCE, was one of the most famous Greek sculptors. He was the artistic director of the Parthenon, an ancient temple in

Athens, Greece.

**Star sculptor** 



### **Unique craft**

In the 1st century, Romans used a complicated technique to produce jewelry, platters, and vessels made of cameo glass. The pieces usually had a dark blue background and were covered with opaque white figures.



### On display

The Department of Greece and Rome at the British Museum in London, UK, has one of the world's largest collections of artifacts from 5000 BCE to the 4th century. It contains more than 100,000 pieces.



# **Arts and entertainment**





# Inspiring film about a young athlete

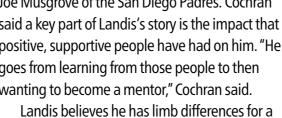
G

talented athlete who was born without legs or hands is the star of a new documentary. Landis: Just Watch Me follows Landis Sims, a teen from Indiana, who dreams of making his high school baseball team. The film is available to rent or own on cable TV and streaming platforms.

Director Eric Cochran first spotted Landis when he was a young boy playing baseball at an event. He had prosthetic legs, held his bat tucked against his body, and was smashing balls into the outfield. "I was mesmerized," Cochran told The Week Junior.

The film checks in with Landis over the course of eight years. It shows him getting prosthetics that make it easier to move, working extra hard to improve his skills, and spending time with pitcher Joe Musgrove of the San Diego Padres. Cochran said a key part of Landis's story is the impact that positive, supportive people have had on him. "He goes from learning from those people to then wanting to become a mentor," Cochran said.

reason and doesn't let them hold him back. "He's not afraid to try anything," Cochran said. In fact, he surfs and plays basketball, too. Cochran said Landis's baseball dream was a good story to tell, but even if that goal had changed, he still would have made the film. "He is a good spokesperson for anybody going through challenges."





# THIS WEEK'S



### **Big Nate** (Paramount+)

Sixth-grader Nate Wright continues to cause disasters at home and gets sent to detention at school in new episodes of the animated series based on Lincoln Peirce's popular books. This batch of shows also introduces his grandparents and explores his friends' backstories.



### **Lost Ollie** (Netflix)

Inspired by the 2016 book Ollie's Odyssey, this new four-part series is a hybrid of live-action and computer-generated animation. It tells a heartwarming story about a stuffed bunny that embarks on an epic adventure after he is taken from the boy that owns him.



### A Cowgirl's Song (Netflix)

In this music-filled film, Hailey and Brooke's father is falsely accused of stealing, so they ask their grandmother, a retired music legend, to hold a concert so they can raise money to help him. She'll help aspiring country singer Hailey overcome stage fright, too.

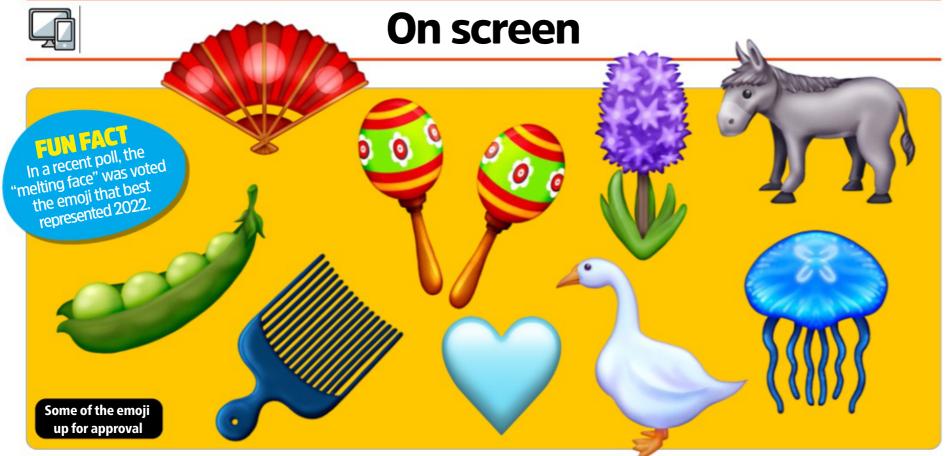
### **MOVIE NIGHT**

If you're looking for a film to watch with family or friends, consider this pick of the week.

### Ratatouille (2007) (Disney+)

This beloved film is set in France and follows a rat named Remy. While his family eats trash, Remy dreams of being a great chef just like his human idol, Auguste Gusteau. When Remy's rat colony is found in the walls of a country home, all the critters flee and Remy is separated from his family. He ends up in Paris at Gusteau's restaurant. When he sees a clumsy new hire named Alfredo mess up a soup, he steps in to fix it and Alfredo catches him. After the soup is a success, Alfredo decides to hide Remy under his chef hat so the rat can tell him how to make delicious dishes for the restaurant. Meanwhile, as Remy's family searches for him, the restaurant owner grows suspicious of what's happening in his kitchen. Can Remy and Alfredo keep their secret from everyone?





# New group of emoji on the way

he variety of emoji that people can use on phones, computers, and other devices is about to expand. The Unicode Consortium, the group in charge of choosing the characters, has released a draft of 31 new designs that are currently up for approval. The official Emoji 15.0 list is expected in September.

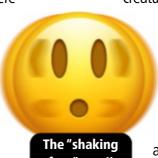
The number of new emoji will be smaller than usual. There were 112 new ones added in 2021 and more than 300 in 2020. Design ideas are submitted from people around the world, but because there are so many emoji already, the need for more is shrinking.

Among the designs under consideration are a hair pick, a folding hand fan, maracas, and a shaking face. There are also "pushing" hands, with one that faces the right and one that faces the left. They can be used to simulate high-fives.

Some of the new animal emoji include a moose, a jellyfish, a donkey, and a goose. "You might think, 'Why do I need a moose emoji?' " said Keith Broni, editor of the Emojipedia website. "Well, actually, a lot of people across the world deal with moose on a frequent basis, and they're pretty significant creatures. If you encounter one, you're going to remember."

> Important symbols are also being considered. One is a Khanda, an image with two swords. It is the universal symbol of the Sikh religion, a faith from India that is one of the largest religions in the world. There may be plain hearts in pink and light blue, too.

If the current batch is approved as expected, it will bring the total number of emoji to 3,664 in all. The new ones will become available on different platforms later this year and in 2023.



### **GAME OF THE WEEK**

### **TIME ON FROG ISLAND**

PlayStation, Xbox, Nintendo Switch, PC This relaxing game has you shipwrecked on an island full of friendly frogs. To get what you'll need to repair your boat, you'll have to learn to farm and fish, hunt for treasures, and solve puzzles. Be prepared to do favors for the inhabitants and trade items with them too.





### THE RADIO ADVENTURES OF DR. FLOYD

Major podcast platforms

Narrated in an old-time radio show style, this series follows a brilliant scientist as he races through time to stop his archrival from carrying out evil plans. Along the way, listeners learn about people and events that shaped history.

### VIDEO OF THE WEEK

### **PENGUIN QUESTIONS ANSWERED**

tinyurl.com/TWJUS-Penguins

In this installment of a series called "Weird Animal Searches," a bird expert from a zoo takes on some of the most googled questions about penguins. Can they fly? Why do they waddle? Why do they look like they're wearing tuxedos? This video reveals the answers.



### **BOOK OF THE WEEK**

# **Stinetinglers**

By R.L. Stine

(Feiwel and Friends)

R.L. Stine, the author of the popular Goosebumps series, has written this new collection of 10 spooky stories. In the first one, called "Welcome to the In-Between," a boy who is always running late breaks a watch and gets stuck in time. The next tale is about a girl who has to babysit the new neighbor's children who are poorly behaved. It has a big surprise at the end. Another story centers on a group of kids who find a hole in the ground. What's inside makes this a heart-pounding tale. Before each story begins, Stine explains how he came up with it. For instance, the babysitting plot was sparked by the experience he and his brother had caring for their younger cousins. You may want to read this book aloud at a sleepover. While the stories will probably make you shiver, they're not super scary.

### WIN A BOOK!

We're giving away five copies of *Stinetinglers*.

For a chance to win, send your name and address to contests@theweekjunior .com with Stinetinglers in the subject line. Enter by midnight on September 16. See theweekjunior.com/terms for complete rules.



**Book club** 

**R.L. Stine** 

We spoke to the author of *Stinetinglers*.

# Did you love scary stories growing up?

When I was a kid, there were these great comic books called *Tales from the Crypt*. They were really scary, and I loved them.

# Why do you add humor to your stories?

Whenever a scene I'm writing starts to get too scary, I throw in something funny. I don't want a story to be too intense. I also think humor and horror are very closely

related. I think they get the same kind of reaction.

# Did you always want to be a writer?

I wanted to be a cartoonist. I really wanted to draw comic books, but I couldn't draw. So I had to be a writer.

### **Zombie or mummy?**

I would definitely vote for mummy. I don't like zombies.

### **Favorite season?**

Summer. I try not to leave my swimming pool.

# 4 books that are filled with riddles

The characters in these picks are faced with puzzles. Can you help solve them?

### RACE ESCAPE ESCAPE

### Race for the Escape

By Christopher Edge

(Delacorte Press)

Ami's dad gets her a ticket to an escape room for her 12th

birthday. She and four other kids are facing warriors and prehistoric beasts when they realize the scenarios in the escape room aren't make-believe. Will they be able to save the world and themselves? *Ages 9–12* 



### Mr. Lemoncello's All-Star Breakout Game

By Chris Grabenstein

(Random House Books for Young Readers)

Kyle can't wait for the start of a TV game show that involves players becoming characters inside a story. The players must solve puzzles in a comic book room, a horror room, and more. This suspense-filled book is the fourth in the Mr. Lemoncello's Library series. *Ages 8–12* 



# The Lost Wonderland Diaries

By J. Scott Savage (Shadow Mountain)

Celia, a math whiz, and Tyrus, a

bookworm, find the lost diaries of Lewis Carroll, the author of *Alice in Wonderland*. The diaries describe a dark world that Celia and Tyrus accidentally open the door to. They must work together to solve puzzles and riddles if they want to return home. *Ages 8–11* 



# Samantha Spinner and the Super-Secret Plans

By Russell Ginns

(Delacorte Press)

When Samantha's uncle goes

missing, he leaves her a rusty red umbrella with a tag that says, "Watch out for the rain." What is he trying to tell her? Turns out, the umbrella has a map of secret passages that take her around the world. The story has many hidden puzzles. *Ages 8–12* 



OOKS AND AUTHOR: COURTESY THE PUBLISHERS; GETTY IMAGES

### **READER RECOMMENDS**

### When the World Was Ours By Liz Kessler

"This book is about three best friends: Elsa, Max, and Leo. They are living in Nazi Germany, and because of Hitler, they have to move away from each other. Over the course of the book, each character changes from a little kid to a young adult. They hope to meet again, but if and when they do, it won't be the same. This book has a bittersweet ending. Therefore, I suggest it for ages 11 and up." Sanvi, 11, Texas

Do you have a book to recommend? Send your review to hello@theweekjunior.com.

September 2, 2022 - The Week Junior



### How to...



# Give graphic design a try

### This creative art form is used to inspire and communicate with others.

Graphic design is an art form that uses design elements, including images and text, to provide people with information. There are examples of it everywhere in daily life, including this magazine. Learning about graphic design can be helpful in many ways. For instance, if you want to make a poster to tell people about an activity you are working on, such as a bake sale or a play, following graphic design principles can make your poster stand out. Here's how to get started.

### Recognize graphic design

Besides being used to make magazines, graphic design is used to create other products. For instance, the packaging on food and consumer goods, such as shampoo and soap, is created when artists combine images and text.

Websites and apps are made using graphic design. When advertisers want to get the word out about a product, graphic design is used to make ads to display on posters, billboards, social media, and more.

### **Understand basic principles**

An important principle of graphic design is that the words are legible, meaning they are easy for people to read. The font you choose can be playful and set the tone for your design, but you want to be sure that other people can easily understand the words. If you have a bold font, you

could make the letters white and put them on a dark background—or make the letters a dark color against a pale background. You also want people to read the most important information first, such as the title. You may want that to be in the largest type size and at the top.

### Pick a project

The best way to learn about graphic design is to try it out. Graphic design is primarily done on computers, but you can start with paper and pen if you wish. For example,

you could first find images in magazines or newspapers and arrange them on paper or

poster board. You can also draw your own images. Decide what words or phrases you want to use and where you want them to go. Practice writing the words on another piece of paper, then write them on your design. Besides posters, you could make your own business cards if you want to start a pet walking or babysitting business. Or you could make tags for jewelry or

pottery that you want to sell to friends and family.

### **Get more experience**

Use color in

your designs.

If you enjoy graphic design, you could take a class to learn more about it and how to use design software. Your school may even offer a design course or club. Talk to a teacher about your interest. If your school doesn't have a club, maybe you could help start one!

# 4 programs that teach graphic design

If you want to make art that combines images and text on a computer, ask an adult if you can download one of these programs.

### **Canva**

Use the free version of this app to design creations like greeting cards, posters, and fliers. Start with a blank page to create your own design, or try one of the templates for inspiration.



combine images and text with its fun backgrounds. You could use it to make fliers and posters, for example.

### **Google Drawings**

If you or a family member has a Google account, this program is available for use. You don't have to download an app. It allows you to add your own images and text to make a design.



### Inkscape

This free program features a drawing pencil tool.

You can use it to

create your own drawings or add special arrows or underlines to bring attention to important information in your design.

### How to...



# WRITE A REVIEW OF A BOOK YOU READ

A book review is a description of what you thought of a book. Sharing it with others can help them decide whether they might want to read the book too. Here's how to write one.

- **1. Choose a book.** Aim to write about a book you enjoyed reading. It will be more fun to describe the characters and the plot, and people who are looking for a book to read will want to read your review.
- 2. Start writing. First, give a short summary of what the book is about, without revealing too much of the plot, which might spoil the story for others. Then explain what you liked most about the book and why. This could be the narrator's voice, the setting, or a problem a character faces. If the book reminds you of another book, you can add that.
- **3. Publish it.** Once you're done, ask an adult to email your review to *hello@theweekjunior.com*. We print reviews from readers on our weekly Book Club page (p23).





# Make sweet cups of berry fool

### **Ingredients**

- 1 cup fresh berries (raspberries, blueberries, blackberries, or a combination), plus more for topping
- 2 teaspoons lemon juice
- Pinch of salt
- 2 tablespoons confectioners' sugar, divided
- 1 cup heavy cream, chilled

### **Instructions**

- Combine the berries, lemon juice, salt, and half of the sugar in a medium bowl. Using a fork, mash up the berries until they have a jam-like consistency.
- 2. In a large bowl, combine the heavy cream and the remaining tablespoon of sugar. Beat on high with an electric mixer for about 1 minute or until the cream holds a soft peak when you lift the beaters up.
- **3.** Use a spatula or large spoon to gently fold the mashed berry mixture into the whipped cream. It's OK if streaks

of berries remain. Spoon the fool into cups or small bowls and top with more fruit, if desired. Makes 4 servings.

### **Helpful tips**

- If you're pressed for time, you can fold the fruit mixture into storebought whipped cream instead of making your own.
- Consider serving this dessert with cookies. People can use a cookie to scoop up the fruit mixture.
- This recipe also works well with frozen berries. First, defrost the fruit according to the package instructions.



Many items that you frequently use, such as a TV remote or a calculator, are powered by batteries. Once those batteries no longer work, it's important to correctly dispose of them. If you put them in your regular trash or recycling, the chemicals and heavy metals inside the batteries can leak and possibly contaminate nearby soil and water. To properly dispose of them, you'll want to take them to a battery recycling center. Ask an adult to help you go online, or call your local community center to see if this service is offered in your area. You can also try visiting websites like <a href="call2recycle.org">call2recycle.org</a> or <a href="biggreenbox.com">biggreenbox.com</a> to find a battery recycling center in your area.







### **Puzzles**

6 letters

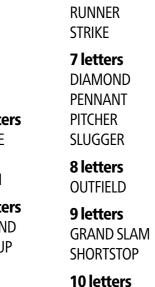
Each of these words about baseball fits into this grid. Can you find where each one goes to complete the grid?

3 letters
BAT
CAP
HIT
OUT
UMP

4 letters

**GAME** MITT **TEAM** 

**5 letters MOUND** POP-UP SLIDE



# **Take five**

Five 5-letter types of boats are hidden in this grid. For each one, the first letter is somewhere in the first column, the second is somewhere in the second column, and so on. Can you find all five? (NEED A HINT? Check the bottom of the page.)

S	A	0	R	E
C	E	N	Α	Р
Y	Α	R	0	K
K	L	Y	Н	Y
F	Α	C	0	T

# **ALL THE SAME**

TRIPLE PLAY

Each answer contains the letters P-R-O. Those letters have been placed for you. Can you figure out the words?

1. Protective garment for a cook

P R O

2. Say "I swear I'll do it!"

**PRO** 

3. Start to grow, like a plant does

P R O

4. Teacher of college students

PRO

5. Make better

# **SUDOKU**

To complete the grid, place the numbers from 1 to 6 exactly once in each row, column, and 2x3 bold-lined box.

2					6
		6		2	
	2		6		
8		3		1	
	5		1		
1					3

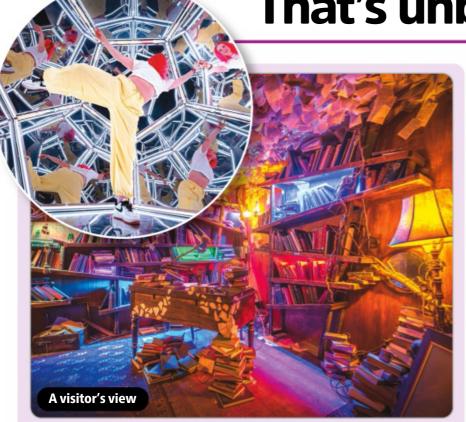
**Spot the difference**These two pictures of the Taj Mahal appear to be the same, but take a closer look. There are actually five differences. Can you see them?





# That's unbelievable!





# Inside an "amazement park"

The world's first "amazement park" has opened in Bristol, in the UK. The park, called Wake the Tiger, uses lights, sound, and costumes to transport visitors into a fabulous world. There's a secret portal leading into magical tunnels, forests, and ice caves—each with a problem: They're littered with Earth junk. The park's goal is to inspire people to think and care about the world. Its creative director, Lak Mitchell, says visitors are invited to see the connections between people and the environment—ideally to help transform the Earth.

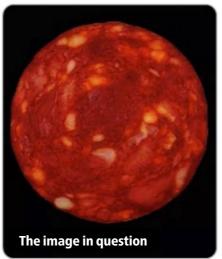
### One way to cool down

During the long heat wave in Japan, clothing designer Rei Uzawa noticed that her chihuahua was suffering on walks, even at night. Uzawa had an idea: a wearable fan for pets. The designer teamed up with vets to create a light coat with a small battery-operated fan attached to it, which blows cool air around the animal's body. Now dogs and cats in Japan have a high-tech solution for getting their exercise in hot weather.



### A star—or a sausage?

Étienne Klein, a famous French physicist, fooled many social media users when he posted what he said was an image of Proxima Centauri, the star closest to the sun. It was captured by the James Webb Space Telescope, he said, adding that he was wowed by its "level of detail." Later, he revealed that he had actually shared a slice of chorizo, a Spanish sausage, to encourage people not to believe everything they see.





# A tasty sea creature treat

They're slimy, they can sting you, and some are even deadly—not everybody's idea of the perfect food. Even so, it turns out that jellyfish can be used to make a delicious snack that is rich in vitamins and minerals. Food scientists in Denmark turned the creatures into crunchy, chip-like snacks by covering them in salt and vinegar or soaking them in alcohol. The discovery could be a way to control rising jellyfish populations. Is this real, or can you see through this lie?\*



# Shaun the Sheep heads to space

Shaun the Sheep, from the popular animated TV show, is about to be sent into space. NASA, the US space agency, will put a stuffed toy version of Shaun inside the Orion spacecraft as part of its Artemis 1 mission later this month. The European Space Agency (ESA) organized his inclusion in the mission, celebrating 15 years since Shaun's TV series first aired in the UK. Shaun will travel beyond the Moon—farther than any human (or sheep) has ever gone—before returning to Earth about a month after take-off. A member of ESA described it as "a giant leap for lambkind."

\*Real! The chips are being developed thanks to a rise in jellyfish numbers around the world. Warmer seas have helped the animals thrive—and now they can help humans get their fill of crispy snacks.

# A

### **Your turn**

### **Editor's note**

Our team cheered when we learned about an exciting new discovery made by researchers at Northwestern University in Evanston, Illinois (p2). After many years of effort and experiments by many scientists, this team found a way to break down harmful "forever chemicals." This is a big deal because these chemicals pollute water, soil, and air and have been linked to serious health problems, including cancer. An interesting aspect of the story is that one of the researchers, Brittany Trang, initially thought the solution she was asked to try was "too simple." Fortunately she tried it anyway-and was greatly surprised when it worked. What did you think of this news? Have you ever succeeded at something you were skeptical about? I would love to know. Write to me anytime at hello@theweekjunior.com.

Andrea Barbalich
Editor-in-Chief

# Working with restaurants to help Ukraine

**66** When I first heard about the war in Ukraine, I wanted to help. But I thought whatever I did would not make a difference. Then I thought again and said to myself, every penny makes a difference. I started a fundraiser where I asked restaurants in the town I live in to donate some of their profits from one evening of business to help Ukraine. My goal was to raise \$5,000 to give to World Central Kitchen (WCK). I chose WCK because of its reputation—it has handed out more than one million meals in Ukraine. With a percentage of profits from five restaurants and donations from many friends, I have raised more than \$9,000 and am on track to raise \$10,000.77



Have you done something interesting or raised money for a cause you care about? Whatever you're up to, we want to hear about it at hello@theweekjunior.com.

RIDDLE OF THE WEEK What grows taller once the head is removed? Your pillow

### CHARITY OF THE WEEK



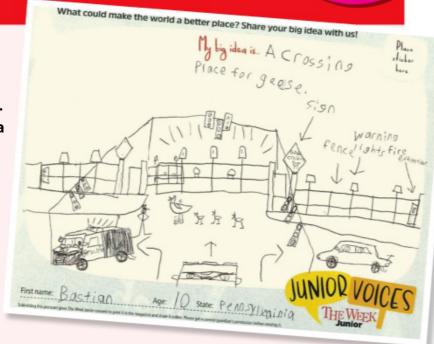
### MicroActivist Foundation

This organization aims to protect the world's oceans. It connects young people with hands-on activities they can do, such as beach cleanups. It promotes awareness of caring for oceans through classroom outreach programs. First founded by an 11-year-old in California, more than 8,000 young activists have now joined the organization's efforts. Find out more at microactivist.org.

# INNIOD NOICES

### **Share your idea!**

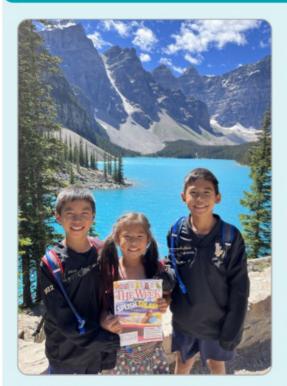
We know you have amazing ideas, and we want to hear them. To take part in Junior Voices, ask a parent or guardian to download a postcard at <a href="mailto:theweekjunior.com/juniorvoices">theweekjunior.com/juniorvoices</a>. Write or draw your idea for making the world a better place and send it to us at <a href="mailto:hello@theweekjunior.com">hello@theweekjunior.com</a>. Every idea counts! We'll feature more kids' ideas on this page in future issues.



# THE WEEK IT'S YOUR TURN

Email your news, views, and photos to hello@theweekjunior.com.

We'd love to see pictures you've taken or pictures with you in them! Send them to us at hello@theweekjunior.com, along with anything you'd like to tell us about what's in the photo.



"We brought *The Week Junior* on our travels to the Canadian Rockies!" Landon and Darren, 9, and Kyla, 7, California

"We made paintings and sold them at our neighborhood artist bazaar to raise money for St. Jude Children's hospital." Aarna, 8, and Shriya, 9, North Carolina





"We went to Chicago for my uncle's wedding, and when we were there, we noticed the Art Institute's Cezanne exhibit that we saw in *The Week Junior*."

Poppy, 9, and Julian, 7, Oregon

### POPJAM

Sign up and follow @theweekjuniorus on PopJam, a social media platform for kids 7–12. Ask an adult to download the app from iTunes or Google Play.

We asked: Who is your favorite mythological character?

"Athena. She inspired me to be brave and wise"

"Medusa, because she has hair made of snakes and can turn people into stone."

"Artemis. She plays a really cool role in Percy Jackson."

"Hestia, the one who never fought with her Olympian siblings"

In the big debate, we asked: Should people take off shoes indoors?

"I think it's what you are comfortable

"Yes, it keeps the house cleaner."

"I would aways ask the owners if it is okay to keep them on or not."

"Yes, because houses are a plac of comfort."

Now tell us: If you could introduce a new subject in school, what would it be and why?

# Teacher OF THE WEEK

Teacher's Name: **Mrs. Hamilton**School Name: **Leverett Elementary** 

"Mrs. Hamilton is a really nice teacher!

She lets us play fun learning games, such
as Gimkit and Kahoot. She treats us
with respect and care. I can always talk to
her if I have a problem or a question.
I can tell she loves being a teacher, and I wish
I could have her next year too!"

Beatrice, 9, Arkansas

Nominate your teacher for Teacher of the Week!

Send your reason for the nomination, a photo of your teacher, and your school's name and address to hello@theweekjunior.com.

### Puzzle answers (from page 26)

Take five sloop canoe yacht kayak ferry

All the same
1. apron
2. promise

3. sprout4. professor5. improve

PENNANT SUIDE M F K GAME PITCHER I H E A TRIPLEPLAY BAI I D

### 6 1 4 5 2 3

### **Quiz answers** (from page 30)

1 a) Chorizo
2 False. He wants to make the baseball team.
3 31
4 b) Crown Palace
5 True
6 Goosebumps
7 Mount Kilimanjaro
8 True
9 b) C.F. Monterrey
10 False. They had vibrant colors.
11 Davidson
12 True
13 c) 45
14 False. It is being built in the Maldives.
15 c) France

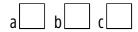
We want to hear from you! To have your letters, photos, nominations, recommendations, or ideas considered for inclusion in the magazine, please include your full name, age, and state with your submission. By emailing your submission to us, you give *The Week Junior* consent to publish it in the magazine and online. Please get your parent/guardian's permission before sending anything to us.

# **Quiz of the week**

# How much of this week's news can you remember?

How much o
<b>1</b> A French scientist tricked people on social media into thinking an image of what type of food was a photo of a star?
a) Chorizo b) Roast beef c) Pulled pork
a b c
<b>2</b> True or false? The documentary Landis: JustWatch Me follows a teen hoping to make his high school basketball team.
True False
<b>3</b> How many new emoji are being considered for approval this year?
-

- **4** What does the name Taj Mahal mean in the Persian language?
- a) Grand Palace
- b) Crown Palace
- c) Majestic Palace



**5** True or false? Millions of years ago, the ancestors of modern penguins lived in warm environments.

True False

**6** Stinetinglers author R.L. Stine also wrote what popular book series?

**7** High-speed internet access was recently set up on what mountain in Africa?

**8** True or false? Lumpfish were once thought to come in a variety of colors.

True False

30











- **9** Soccer team Olympique Lyonnais defeated which team to win the Women's International Champions Cup?
- a) Chelsea b) C.F. Monterrey

c) Portland Thorns

**10** True or false? In Ancient Greece and Rome, statues were plain white marble.

True False

**11** What college in North Carolina did professional basketball player Stephen Curry attend?

**12** True or false? In a recent survey, 95% of teens said they have access to a smartphone.

True False

**13** NASA's Voyager 2 spacecraft has spent how many years in space?

a) 25 b) 35 c) 45

h c

**14** True or false? A floating city capable of holding up to 20,000 people is being built in Malaysia.

True False

**15** The movie Ratatouille, about a rat named Remy who dreams of becoming a chef, is set in what country?

a) Italy

b) Spain

c) France

a b c

# THE WEEK

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